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INSOMNIA, BODY PAIN INTENSITY AND HOPE AMONG WORKING WOMEN

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Abstract

Working Women are subjected to numerous pressures, owing to various responsibilities and varied roles that they fulfill. The COVID pandemic has brought forth a lot of added chores at home and outside. Economic pressures have added to their stress. Mental health of working women has faced huge challenges. Women struggle to meet all expectations of work and at home, during the day and are fatigued at the end of the day. At night, they are extremely tired that sleep too eludes them. Body pain and insomnia are the remnants of this age of high demand and stress. This paper attempts to understand the level of insomnia, body pain intensity and the levels of remaining hope among Working Women.

Fifty two working women from various fields were selected through random sampling and administered by the Insomnia Scale (Croenlein et al., 2013), Brief Pain Inventory (Cleeland, 1994) and the Adult Hope Scale (Snyder et al., 1991). The results indicated that many women faced troubles with Insomnia and Body pain issues. The higher the intensity of pain experienced, higher is the level of Insomnia, and lower the Hope. The mental health of working women requires special care during the pandemic.

Keywords: *Insomnia, Brief Pain Inventory, Hope, Working Women*

INTRODUCTION

Women are generally known to be multi taskers. They fulfill varied roles with ease, are wonderful mothers, dutiful daughters, caring daughters-in-law, lovely and enthusiastic wives, beautiful sisters, jubilant friends, and brilliant in all that they set their minds to. Many times, they take on varied roles when they work outside their homes. Nowadays, women have conquered all professions to the board room to rocket engineering. Women have made their presence felt in all spheres of life and have mostly eliminated the Gender differences in professions. But still, owing to various roles and responsibilities that the working women have, they tend to neglect their own physical and mental health; and well being, instead focus and concentrate on fulfilling the expectations from their various roles, thus paying the price for satisfying everyone else and ignoring themselves. Many of them encounter numerous aches and pains in their bodies, suffer from migraines, body pain, stomach disturbances, leg pain and many such acute and chronic pain related disorders. Many of them are so tired by the end of the day and in so much pain that sleep also eludes them. Many hence suffer from Insomnia and numerous aches and pains. As a result of these issues, their personal and professional lives suffer greatly. They are left wanting in numerous spheres and cause them a great amount of worry and stress. Their mental health and well being hence deteriorates. The whole process becomes a vicious circle thus sucking them into the vortex of stress, anxiety and many other such mental health issues.

INSOMNIA AND PAIN

Insomnia has been defined in most researches as, the experience of sleeplessness despite the time and opportunities to fall asleep. This difficulty can be manifested in the ability to fall asleep or stay asleep. Many times insomnia is considered the inability to sustain non restorative sleep patterns, and this difficulty many times persists despite sufficient opportunities and situations conducive to developing a good sleep. Also it has been considered that insomnia leads to distress and disturbance of day time activities (Roth, 2007). Short term or transient insomnia is a temporary phase of sleeplessness most probably due to stress or any form of trauma. This type of insomnia is temporary and subsides when the stress is relieved. Many times pain in the body, such as headache, back ache, body pain and many other forms of pain also lead to insomnia. This type of insomnia caused by other factors, such as pain in this case is known as secondary insomnia. The relationship sleep and pain is most likely to be bidirectional, though the interaction effects between the two problems requires further research (Tang, 2008). A chronic painful condition physically, leads to worsening the symptoms of insomnia

are the result of many such researchers (Ohayon, 2005). The major forces working to improve the mental health and well being here is seen as the optimism and hope that an individual has. Better optimism and hope levels foster better pain management and improve the quality of sleep. This paper attempts to understand the level of insomnia, body pain intensity and the levels of remaining hope among working women.

A brief review of available literature was conducted to better understand the constructs taken up for study.

Smith (2015) conducted a large study examining the effectiveness of cognitive behavioural therapy as a sole treatment for insomnia related to chronic pain. Results showed that patients in the cognitive behavioural therapy group had significantly greater reductions in wake time after sleep onset. In that group, most patients also reported significant and comparable reduction in pain over six months , with one third of them reporting a 30% reduction in pain severity. Furthermore, diary and polysomnography measurements of sleep improvement predicted decreased pain at each study end point, indicating that better sleep has at least some beneficial effects on pain. Andrew et al. (2019) reported that a variety of pharmacological treatment options are available along with cognitive behavioural therapy as a viable option.

Significant relationships were reported between Total Hope Scale scores and the psychosocial inferences of pain in the Brief Pain Inventory (BPI) and sleep among 225 oncology patients (Utne, Miaskowski, Bjordal, Paul, Jakobsen and Rustoen 2008). Another interesting research on the neural pathways involved in the sensation of pain and its relationship to addiction, depression and anxiety was conducted by Zamponi (2019). This research also helped develop a newer drug therapies to target the pain stimulation and provide relief for pain sufferers along with providing relief for anxiety and depression arising out of the pain.

Schiavon, et al.(2017) identified the scientific literature on the influence of optimism and hope on chronic disease treatment. The studies about optimism had more similar outcomes than the hope studies due to the fact that they focused mainly on cancer and cardiac diseases, while hope studies mentioned a wider range of conditions. It was reported that there are still a small number of articles that relate optimism and hope with chronic disease, that many of the authors have focused on studying mainly heart disease and cancer in comparison with hope, optimism was used in a larger number of studies. Another longitudinal study tested the prospective effects of hope on depression and anxiety among 522 college students. Results indicated that statistically significant negative effect for the agency component of hope on later depression but no unique effect of the pathways component of hope on depression. Likewise, agency showed a statistically significant negative effect on later anxiety, but again pathways had no significant influence on anxiety. In both cases, neither depression nor anxiety demonstrated any longitudinal effects on either the agency or pathways components of hope.

The above review indicates that there is a need to identify the relationship between insomnia, pain intensity and hope among the specific population of working women, who undergo high levels of stress.

METHOD

The study on “Insomnia, Body Pain Intensity and Hope among Working Women” was undertaken with the following objectives:

- To identify the levels of pain and insomnia among the participants
- To identify the levels of hope among the participants
- To identify the relationship between insomnia, pain intensity and hope among working women.
- To understand the differences in experiencing insomnia, pain and hope based on age, income levels, type of employment and marital status.

HYPOTHESES

The null hypotheses for the study are as follows:

- There will be no significant relationship between insomnia, pain and hope among working women
- There will be no significant difference in insomnia, pain and hope between working women based on their age group
- There will be no significant difference in insomnia, pain and hope between working women based on their income levels
- There will be no significant difference in insomnia, pain and hope between working women based on their type of employment
- There will be no significant difference in insomnia, pain and hope between working women based on their marital status

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SAMPLE

The sample consisted of 52 working women from various fields who were selected through random sampling and administered by Insomnia Scale (Croenlein et al., 2013), Brief Pain Inventory (Cleeland , 1994) and the Adult Hope Scale (Snyder et al., 1991). The women from age of 22 years to 60 years, who worked in permanent or temporary or contractual posts were included in the sample. Both married and unmarried working women were included. An informed consent was taken from all the participants of the study.

TOOLS

Insomnia Scale (Croenlein et al., 2013), consisting of 10 items regarding the quantity and quality of sleep.
Brief Pain Inventory (Cleeland , 1994) consisted of 9 items with the 9th item containing 7 sub questions regarding the interference of pain with general life.
Adult Hope Scale (Snyder et al., 1991) had 12 items used to measure the individuals dispositional hope.
The data was collected using Google forms and the results analyzed using the SPSS software version 21.

RESULTS

The distribution of insomnia, pain and hope among working women was analyzed. The results are tabulated below.

Table 1. ***Distribution of insomnia, pain and hope among working women***

N= 52

S. No	Levels	Insomnia		Pain		Hope	
		Number	Percent	Number	Percent	Number	Percent
1	Low	10	19	8	15	25	48
2	Moderate	18	35	17	33	16	31
3	High	24	46	27	52	11	21

Table 1 indicates that 19% of the working women face high level of insomnia, 18% moderate level and 46% had high level. Also, it can be seen that 15% of the working women face low pain, 17% face moderate and 27% face high levels of pain. 48% of the working women have low hope, while 31% have moderate and 41% high levels of hope.

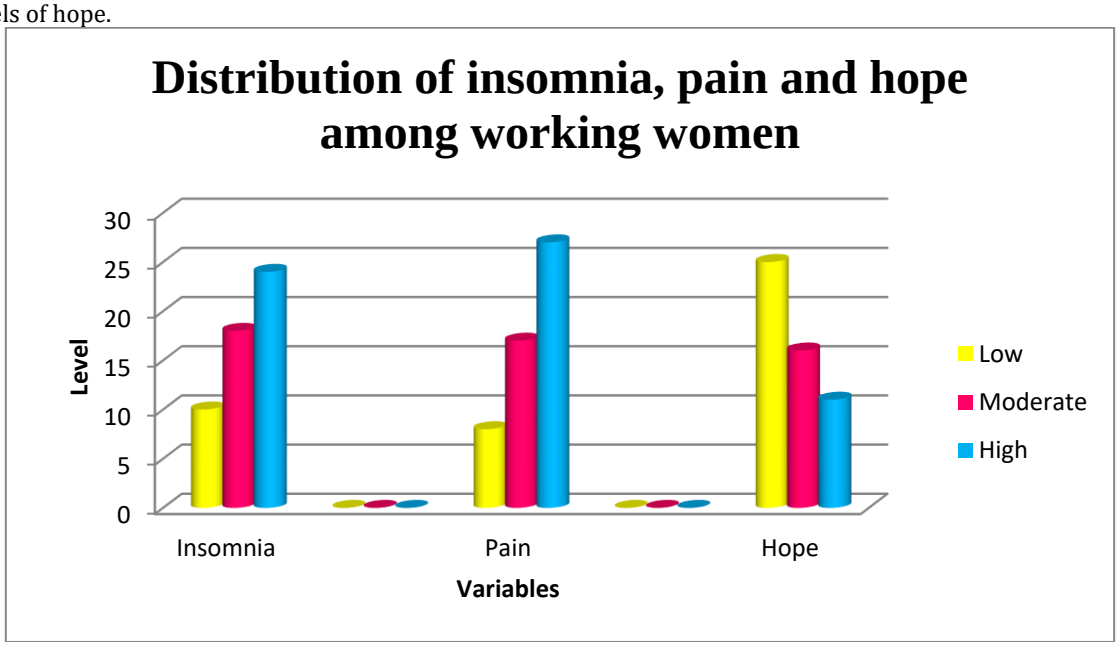

Figure 1. ***Distribution of insomnia, pain and hope among working women***

Product moment correlation was computed between levels of insomnia, pain and hope among working women.

Table 2. ***Correlation between insomnia, pain and hope among working women***

N=52

Variables	Insomnia	Pain	Hope
Insomnia	1	0.58**	-0.56**

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Pain	0.58**	1	-0.79**
Hope	-.056**	-0.79**	1

** = Significant at 0.01 level

Table 2 shows that there was significant positive correlation (r=0.58) between insomnia and pain, which implies that higher the level of insomnia experienced, higher is the pain and vice versa. Also, there was significant negative correlations (r=-0.56, r=-0.79) between hope and insomnia, and hope and pain, indicative of that higher the insomnia and pain, lower the hope and vice versa respectively. Hence the hypothesis, "**There will be no significant relationship between insomnia, pain and hope among working women**" is rejected.

Table 3. ***t test for insomnia, pain and hope with regard to age groups among working women***

N= 52

Variables	Age	N	Mean	S. D.	t
Insomnia	**Below 30 years**	31	22.94	6.03	3.50**
	Above 30 years	21	14.82	8.11	
Pain	**Below 30 years**	31	23.32	7.05	1.07NS
	Above 30 years	21	20.36	9.94	
Hope	**Below 30 years**	31	14.45	7.59	1.38NS
	Above 30 years	21	18.27	8.75	

****= Significant at 0.01 level** **NS = Not significant**

The above table indicates that there was a significant difference in the age groups of working women in insomnia, whereas, there was no significant differences between age groups for pain and hope respectively. The age group of below 30 years have higher mean (M= 22.94) for insomnia. This can be interpreted that the younger women spend more time with their gadgets during the night than the older women and hence face sleeplessness. This was verified by a personal interview with the participants. Hence the hypothesis, **"There will be no significant difference in insomnia, pain and hope between working women based on their age group**" is partially accepted.

Table 4. ***t test for insomnia, pain and hope with regard to income levels among working women***

N= 52

Variables	Income	N	Mean	S. D	t
Insomnia	Below 25,000	20	21.70	6.99	0.73NS
	Above 25,000	32	20.00	7.94	
Pain	Below 25,000	20	24.10	7.48	1.22NS
	Above 25,000	32	21.14	8.15	
Hope	Below 25,000	20	16.40	8.10	0.72NS
	Above 25,000	32	14.59	7.97	

NS= Not significant

Table 4 depicts that there was no significant differences in the levels of insomnia, pain and hope among working women with regard to income levels. This can be interpreted that working women of all income groups experience equal amount of insomnia, pain and hope. Hence the hypothesis, "**There will be no significant difference in insomnia, pain and hope between working women based on their income levels**" is accepted.

Table 5. ***t test for insomnia, pain and hope with regard to type of employment among working women***

N= 52

Variables	Type of employment	N	Mean	S. D	t
Insomnia	Temporary/Contractual	23	21.47	8.07	0.52NS
	Permanent	29	20.26	7.06	
Pain	Temporary/Contractual	23	22.37	7.71	0.13NS
	Permanent	29	22.70	8.12	
Hope	Temporary/Contractual	23	13.42	7.22	1.52NS
	Permanent	29	17.13	8.35	

NS= Not significant

The above table shows that there was no significant difference in the levels of insomnia, pain and hope among working women with regard to the type of employment. This can be interpreted that working women of all types of employment (Temporary/contractual or permanent) experience equal amount of insomnia, pain and

hope. Hence the hypothesis, "**There will be no significant difference in insomnia, pain and hope between working women based on their type of employment**" is accepted.

Table 6. ***t test for insomnia, pain and hope with regard to marital status among working women***

N= 52

Variables	Marital Status	N	Mean	S. D	t
Insomnia	Unmarried	22	17.08	8.67	2.13^{NS}
	Married	30	22.30	6.49	
Pain	Unmarried	22	22.50	9.14	0.02^{NS}
	Married	30	22.57	7.50	
Hope	Unmarried	22	16.17	8.76	0.36^{NS}
	Married	30	15.17	7.80	

NS= Not significant

Table 6 shows that there was no significant difference in the levels of insomnia, pain and hope among working women with regard to marital status. This can be interpreted that married and unmarried working women experience equal amount of insomnia, pain and hope. Hence the hypothesis, "**There will be no significant difference in insomnia, pain and hope between working women based on their marital status**" is accepted.

CONCLUSION

It can be concluded from the study on "Insomnia, Body Pain Intensity and Hope among Working Women" that:

- There was a significant positive correlation between insomnia and pain intensity among working women
- There was a significant negative correlation between hope and insomnia, and hope and pain intensity among working women
- There was a significant difference among working women of different age groups in the level of insomnia, where as no difference with regards to pain and hope.
- There was no significant difference among working women with regards to income levels, type of employment, or marital status in the levels of insomnia, pain and hope.

It can be concluded that working women face insomnia due to pain that they experience. Interventions to overcome pain and insomnia can significantly improve the hope and happiness levels and well being and overall mental health of working women.

LIMITATIONS

The study had the following limitations:

- The sample size used is small. Larger sample can be used for future research.
- Only working women were included. Future research can compare results of working and non working women.
- Both genders can be included in future studies

IMPLICATIONS FOR FURTHER RESEARCH

As there are significant number of working women facing insomnia and pain, as a result of which their hope levels are reduced, the following can be implemented:

- Employers can conduct interventions to improve the mental health of the women employees
- Government can introduce policy based changes to care for mental health of the citizens
- Interventions focusing on reducing the apprehension of pain as well as focusing on overcoming insomnia need to be developed.

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